

CLAIMS

1. A system for identifying an individual in an electronic transaction, said system comprising:
 - a terminal (10, 12),
 - 5 – an independent portable device (20) including a data processing means (22), and
 - a wireless coupling means (RF COMMUNICATION) for exchanging individual-identification data between said terminal and said portable device,
- 10 said system being characterised by further comprising:
 - a body-medium communication means (OSC COMMUNICATION) including a transmitter (50-62) in the terminal and a receiver (26) in the portable device,
said body-medium communication means being adapted to transmit
15 from the terminal to the portable device a connection code (CONNECTION CODE) at the onset of a transaction upon physical contact established by the individual between the terminal and the portable device; and
 - a control means in the portable device adapted to check said connection code received and conditionally issue to the terminal through said wireless coupling means (RF COMMUNICATION) a signal for enabling further execution of said transaction in response to said connection code complying with predetermined criteria.
- 20 25 2. The system as in claim 1, wherein said control means is further adapted to conditionally issue a signal for enabling the operation of said wireless coupling means before further execution of said transaction.
- 30 3. The system as in claim 1, wherein said checking means in the portable device includes a biometric sensor (30) for checking biometric data of the individual upon physical contact established by the individual.

4. The system as in claim 3, wherein said biometric sensor (30) is one of a fingerprint sensor, a voiceprint sensor and a subcutaneous ultrasonic sensor.
5. The system as in claim 1, further including:
 - a means for detecting an interruption of said physical contact established by the individual between the terminal and the portable device.
6. The system as in claim 1, wherein said body-medium communication means (OSC COMMUNICATION) includes Direct Sequence Spread Spectrum means.
7. The system as in claim 1, wherein said body-medium communication means (OSC COMMUNICATION) is a one-way communication means.
- 15 8. The system as in claim 1, wherein said body-medium communication means (OSC COMMUNICATION) is a non-secure communication means.
9. The system as in claim 1, wherein:
 - said connection code (CONNECTION CODE) transmitted to the portable device includes terminal-type identification data (C),
 - said control means is further adapted to check said terminal-type identification data received by the portable device with respect to corresponding data stored in the portable device, and
- 20 25 – said control means is further adapted to conditionally issue said signal for enabling further execution of the transaction in response to said terminal-type identification data complying with corresponding data stored in the portable device.
- 30 10. The system as in claim 1, wherein:
 - said connection code transmitted to the portable device includes first random data (B),
 - said control means is further adapted to re-transmit said first random data to the terminal through said wireless coupling means (RF COMMUNICATION), and
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the terminal is adapted to check said re-transmitted first random data with respect to said first data transmitted in the connection code.

11. The system as in claim 1, wherein:

- 5 – said connection code (CONNECTION CODE) transmitted to the portable device includes second random data (A),
- said control means is further adapted to store said second random data received,
- the terminal is further adapted to issue a re-transmission request (RTSA) to the portable device through said wireless coupling means (RF COMMUNICATION),
- 10 – said control means is further adapted to re-transmit to the terminal said stored second random data upon reception of said re-transmission request, and
- 15 – the terminal is further adapted to check said re-transmitted second random data with respect to the initially transmitted second random data.

12. An independent portable device (20) for use in a system according to
20 any of claims 1-11 for identifying an individual in an electronic transaction, including:

- a data processing means (22), and
- a wireless coupling means (RF COMMUNICATION) for exchanging individual-identification data with a terminal (10, 12),

25 said portable device being characterised by further comprising:

- a body-medium communication receiver (26) adapted to receive from the terminal a connection code (CONNECTION CODE) at the onset of a transaction upon physical contact established by the individual between the terminal and the portable device, and
- 30 – a control means adapted to check said connection code received and conditionally issue a signal for enabling further execution of said transaction in response to said connection criteria complying with predetermined criteria.

13. A terminal (10, 12) for use in a system according to any of claims 1-11 for identifying an individual in an electronic transaction, including:

- a wireless coupling means (RF COMMUNICATION) for exchanging individual-identification data with a portable device (20),

5 said terminal being characterised by further comprising:

- a body-medium communication transmitter adapted to transmit to the portable device a connection code (CONNECTION CODE) at the onset of a transaction upon physical contact established by the individual between the terminal and the portable device, and

10 – a means for receiving through said wireless coupling means a signal issued by the portable device for enabling further execution of said transaction in response to said connection code complying with predetermined criteria.
